## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau [WIPO]

[Bar Code]

(43) International Publication Date

June 30, 2005 (06/30/2005)

**PCT** 

(10) International Publication Number

WO 2005/059356 A1

(51) International Patent Classification<sup>7</sup>:

F02P 23/04

TARASOVA, Irina [RU/RU]; Frunze Strasse

- (21) International Application No.: PCT/EP2004/013421
- (22) International Filing Date:
  November 26, 2004 (11/26/2004)
- (25) Language in which the international application was originally filed:

  German
- (26) Language in which the international application is published:

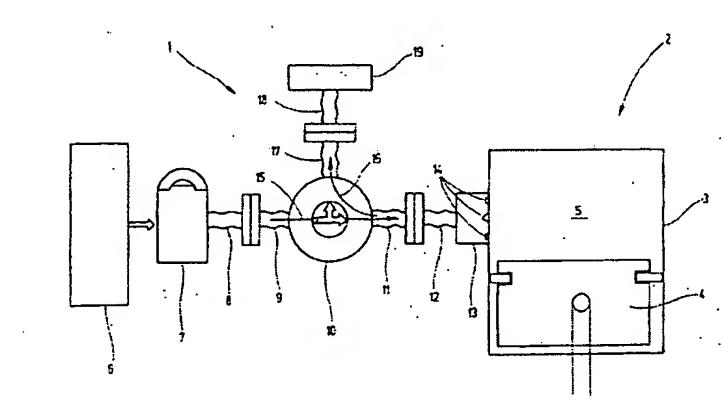
  German
- (30) Priority Data: 103 56 916.2 December 1, 2003 (12/1/2003) DE
- (71) Applicant and
- (72) Inventor: GALLATZ, Volker [DE/DE]; Jettinger Strasse 27, 71083 Herrenberg (DE).
- (72) Inventor; and
- (75) Inventor/Applicant: HIRSCH, Nikita [DE/DE];
  Rostocker Strasse 52, 70376 Stuttgart (DE).

75/151, Ekaterinburg 620144 (RU)

- (74) Representative: BARTELS UND PARTNER; Lange Strasse 51, 70174 Stuttgart (DE).
- (81) Designated States (unless indicated otherwise, for each available type of national protective right): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless indicated otherwise, for each available type of national protective right): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL,

[continued on next page]

(54) Title: METHOD FOR IGNITING COMBUSTION OF FUEL IN A COMBUSTION CHAMBER OF AN ENGINE, ASSOCIATED DEVICE AND ENGINE



(57) Abstract: The invention relates to a method which is used to ignite the combustion of fuel in a combustion chamber (5) of a engine (2), by introducing microwave radiation into the combustion chamber (5), said microwave radiation being produced in a microwave source (7) on the outside of the combustion chamber (5). The introduced microwave radiation is absorbed by the fuel distributed in the combustion chamber (5). The supply of energy, in the fuel, arising from absorption, distributes combustion in a large-volume in the combustion chamber (5), preferably in the entire combustion chamber (5) and in a homogenous manner, and is essentially simultaneously ignited. The invention also relates to an associated ignition device (1) and an associated engine (2).

[Fortsetting auf der nächsten Seite]

SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European Patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Reference is made for an explanation of the twoletter codes and the other abbreviations to the Guidance Notes on Codes and Abbreviations in the front section of each regular PCT Gazette edition.

## Published:

— With International Search Report..